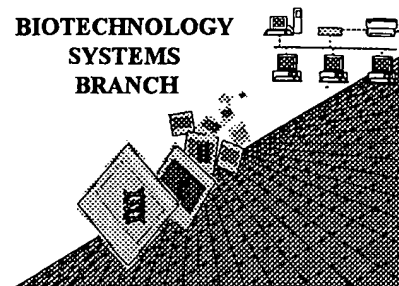


# **RAW SEQUENCE LISTING**

## **ERROR REPORT**

BIOTECHNOLOGY  
SYSTEMS  
BRANCH



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following CRF diskette:

Application Serial Number: 09/256,156

Art Unit / Team No. : 0186

Date Processed by STIC: 3/16/99

**THE ATTACHED PRINTOUT EXPLAINS THE ERRORS DETECTED.**

**PLEASE BE SURE TO FORWARD THIS INFORMATION TO THE APPLICANTS BY EITHER:**

**1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANTS ALONG WITH A NOTICE TO COMPLY or,**

**2) CALLING APPLICANTS AND FAXING THEM A COPY OF THE PRINTOUT WITH A NOTICE TO COMPLY**

**THIS WILL INSURE THAT THE NEXT SUBMISSION RECEIVED FROM THEM WILL BE ERROR FREE.**

**IF YOU HAVE ANY FURTHER QUESTIONS, PLEASE CALL:**

**ARTI SHAH 703-308-4212**

PAGE: 1

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/256,156

DATE: 03/16/1999  
TIME: 09:22:49

Input Set: I256156.RAW

This Raw Listing contains the General Information  
Section and up to first 5 pages.

Does Not Comply  
Corrected Diskette Needed

pg 1-5

1 <110> APPLICANT: GILLIES, Stephen D  
2 LO, Kin-Ming  
3 LAN, Yan  
4 WESOLOWSKI, John  
5 <120> TITLE OF INVENTION: Enhancing the Circulating Half-life of  
6 Antibody-based Fusion Proteins  
7 <130> FILE REFERENCE: LEX-003  
8 <140> CURRENT APPLICATION NUMBER: US/09/256,156  
9 <141> CURRENT FILING DATE: 1999-02-24  
10 <150> EARLIER APPLICATION NUMBER: US 60/075,887  
11 <151> EARLIER FILING DATE: 1998-02-25  
12 <160> NUMBER OF SEQ ID NOS: 8  
13 <170> SOFTWARE: PatentIn Ver. 2.0  
14 <210> SEQ ID NO 1  
15 <211> LENGTH: 447  
16 <212> TYPE: PRT  
17 <213> ORGANISM: Homo sapiens  
18 <220> FEATURE:  
19 <223> OTHER INFORMATION: IGG-1 CHAIN C REGION  
20 <400> SEQUENCE: 1

see item 10 on Env  
summary  
sheet

W-->	21	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
	22	1 5 10 15
W-->	23	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
	24	20 25 30
W-->	25	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
	26	35 40 45
W-->	27	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
	28	50 55 60
W-->	29	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
	30	65 70 75 80
W-->	31	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
	32	85 90 95
W-->	33	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
	34	100 105 110
W-->	35	Xaa Xaa Xaa Xaa Xaa Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu
	36	115 120 125
	37	Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys
	38	130 135 140
	39	Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser
	40	145 150 155 160
	41	Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser
	42	165 170 175
	43	Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser
	44	180 185 190

PAGE: 2

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/256,156

DATE: 03/16/1999  
TIME: 09:22:49

Input Set: I256156.RAW

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45      Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn
46              195                      200                      205
47      Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His
48              210                      215                      220
49      Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val
50      225                      230                      235                      240
51      Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr
52              245                      250                      255
53      Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu
54              260                      265                      270
55      Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys
56              275                      280                      285
57      Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser
58              290                      295                      300
59      Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys
60      305                      310                      315                      320
61      Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile
62              325                      330                      335
63      Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro
64              340                      345                      350
65      Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu
66              355                      360                      365
67      Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn
68              370                      375                      380
69      Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser
70      385                      390                      395                      400
71      Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg
72              405                      410                      415
73      Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu
74              420                      425                      430
75      His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
76              435                      440                      445

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77 &lt;210&gt; SEQ ID NO 2

78 &lt;211&gt; LENGTH: 443

79 &lt;212&gt; TYPE: PRT

80 &lt;213&gt; ORGANISM: Homo sapiens

81 &lt;220&gt; FEATURE:

82 &lt;223&gt; OTHER INFORMATION: IGG-2 CHAIN C REGION

83 &lt;400&gt; SEQUENCE: 2

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W--> 84      Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
85              1                      5                      10                      15
W--> 86      Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
87              20                      25                      30
W--> 88      Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
89              35                      40                      45
W--> 90      Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
91              50                      55                      60
W--> 92      Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
93              65                      70                      75                      80
W--> 94      Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa

```

PAGE: 3

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/256,156

DATE: 03/16/1999  
TIME: 09:22:49

Input Set: I256156.RAW

W--> 95 85 90 95  
96 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
97 100 105 110  
W--> 98 Xaa Xaa Xaa Xaa Xaa Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu  
99 115 120 125  
100 Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys  
101 130 135 140  
102 Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser  
103 145 150 155 160  
104 Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser  
105 165 170 175  
106 Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Asn  
107 180 185 190  
108 Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn  
109 195 200 205  
110 Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu Cys Pro  
111 210 215 220  
112 Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro  
113 225 230 235 240  
114 Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr  
115 245 250 255  
116 Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln Phe Asn  
117 260 265 270  
118 Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg  
119 275 280 285  
120 Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu Thr Val  
121 290 295 300  
122 Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser  
123 305 310 315 320  
124 Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys  
125 325 330 335  
126 Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu  
127 340 345 350  
128 Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe  
129 355 360 365  
130 Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu  
131 370 375 380  
132 Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe  
133 385 390 395 400  
134 Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly  
135 405 410 415  
136 Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr  
137 420 425 430  
138 Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys  
139 435 440  
140 <210> SEQ ID NO 3  
141 <211> LENGTH: 494  
142 <212> TYPE: PRT  
143 <213> ORGANISM: Homo sapiens  
144 <220> FEATURE:

PAGE: 4

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/256,156

DATE: 03/16/1999  
TIME: 09:22:49

Input Set: I256156.RAW

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145 <223> OTHER INFORMATION: IGG-3 CHAIN C REGION
146 <400> SEQUENCE: 3
W--> 147 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
148 1 5 10 15
W--> 149 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
150 20 25 30
W--> 151 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
152 35 40 45
W--> 153 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
154 50 55 60
W--> 155 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
156 65 70 75 80
W--> 157 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
158 85 90 95
W--> 159 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
160 100 105 110
W--> 161 Xaa Xaa Xaa Xaa Xaa Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu
162 115 120 125
163 Ala Pro Cys Ser Arg Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys
164 130 135 140
165 Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser
166 145 150 155 160
167 Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser
168 165 170 175
169 Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser
170 180 185 190
171 Leu Gly Thr Gln Thr Tyr Thr Cys Asn Val Asn His Lys Pro Ser Asn
172 195 200 205
173 Thr Lys Val Asp Lys Arg Val Glu Leu Lys Thr Pro Leu Gly Asp Thr
174 210 215 220
175 Thr His Thr Cys Pro Arg Cys Pro Glu Pro Lys Ser Cys Asp Thr Pro
176 225 230 235 240
177 Pro Pro Cys Pro Arg Cys Pro Glu Pro Lys Ser Cys Asp Thr Pro Pro
178 245 250 255
179 Pro Cys Pro Arg Cys Pro Glu Pro Lys Ser Cys Asp Thr Pro Pro Pro
180 260 265 270
181 Cys Pro Arg Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe
182 275 280 285
183 Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
184 290 295 300
185 Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val
186 305 310 315 320
187 Gln Phe Lys Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
188 325 330 335
189 Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Phe Arg Val Val Ser Val
190 340 345 350
191 Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
192 355 360 365
193 Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser
194 370 375 380

```

*item 10*

PAGE: 5

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/256,156

DATE: 03/16/1999

TIME: 09:22:49

Input Set: I256156.RAW

195 Lys Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro  
196 385 390 395 400  
197 Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val  
198 405 410 415  
199 Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Ser Gly  
200 420 425 430  
201 Gln Pro Glu Asn Asn Tyr Asn Thr Thr Pro Pro Met Leu Asp Ser Asp  
202 435 440 445  
203 Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp  
204 450 455 460  
205 Gln Gln Gly Asn Ile Phe Ser Cys Ser Val Met His Glu Ala Leu His  
206 465 470 475 480  
207 Asn Arg Phe Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys  
208 485 490

209 &lt;210&gt; SEQ ID NO 4

210 &lt;211&gt; LENGTH: 444

211 &lt;212&gt; TYPE: PRT

212 &lt;213&gt; ORGANISM: Homo sapiens

213 &lt;220&gt; FEATURE:

214 &lt;223&gt; OTHER INFORMATION: IGG-4 CHAIN C REGION

215 &lt;400&gt; SEQUENCE: 4

W--> 216 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
217 1 5 10 15  
W--> 218 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
219 20 25 30  
W--> 220 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
221 35 40 45  
W--> 222 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
223 50 55 60  
W--> 224 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
225 65 70 75 80  
W--> 226 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
227 85 90 95  
W--> 228 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
229 100 105 110  
W--> 230 Xaa Xaa Xaa Xaa Xaa Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu  
231 115 120 125  
232 Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys  
233 130 135 140  
234 Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser  
235 145 150 155 160  
236 Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser  
237 165 170 175  
238 Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser  
239 180 185 190  
240 Leu Gly Thr Lys Thr Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn  
241 195 200 205  
242 Thr Lys Val Asp Lys Arg Val Glu Ser Lys Tyr Gly Pro Pro Cys Pro  
243 210 215 220  
244 Ser Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe Leu Phe

Input Set: I256156.RAW

Line	Error/Warning	Original Text
21	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
23	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
25	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
27	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
29	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
31	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
33	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
35	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Ala Ser Thr Lys Gly P
84	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
86	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
88	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
90	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
92	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
94	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
96	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
98	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Ala Ser Thr Lys Gly P
147	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
149	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
151	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
153	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
155	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
157	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
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161	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Ala Ser Thr Lys Gly P
216	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
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220	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
222	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
224	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
226	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
228	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
230	W "N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Ala Ser Thr Lys Gly P

# Raw Sequence Listing Error Summary

## ERROR DETECTED SUGGESTED CORRECTION

SERIAL NUMBER:

09/25/9156

**ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE**

- 1 ☐ **Wrapped Nucleics**      The number/text at the end of each line "wrapped" down to the next line.  
This may occur if your file was retrieved in a word processor after creating it.  
Please adjust your right margin to .3, as this will prevent "wrapping".
  
- 2 ☐ **Wrapped Aminos**      The amino acid number/text at the end of each line "wrapped " down to the next line.  
This may occur if your file was retrieved in a word processor after creating it.  
Please adjust your right margin to .3, as this will prevent "wrapping".
  
- 3 ☐ **Incorrect Line Length**      The rules require that a line not exceed 72 characters in length. This includes spaces.  
All text must be visible on page.
  
- 4 ☐ **Misaligned Amino Acid Numbering**      The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs between the numbering. It is recommended to delete any tabs and uses spacing between the numbers.
  
- 5 ☐ **Non-ASCII**      This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.  
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.
  
- 6 ☐ **Variable Length**      Sequence(s) ☐ contain n's or Xaa's which represented more than one residue.  
As per the rules, each n or Xaa can only represent a single residue.  
Please present the maximum number of each residue having variable length and indicate in the (ix) features section that some may be missing.
  
- 7 ☐ **Wrong Designation**      Sequence(s) ☐ contain amino acid or nucleic acid designators which are not standard representations as per the Sequence Rules (Please refer to paragraph 1.822)
  
- 8 ☐ **Skipped Sequences (OLD RULES)**      Sequence(s) ☐ missing. If intentional, please use the following format for each skipped sequence:  
(2) **INFORMATION FOR SEQ ID NO:X:**  
(i) **SEQUENCE CHARACTERISTICS:**(Do not insert any headings under "SEQUENCE CHARACTERISTICS")  
(xi) **SEQUENCE DESCRIPTION:SEQ ID NO:X:**  
This sequence is intentionally skipped  
  
Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).
  
- 9 ☐ **Skipped Sequences (NEW RULES)**      Sequence(s) ☐ missing. If intentional, please use the following format for each skipped sequence.  
<210> **sequence id number**  
<400> **sequence id number**  
000
  
- 10 ☐ **Use of n's or Xaa's (NEW RULES)**      Use of n's and/or Xaa's have been detected in the Sequence Listing.  
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.  
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
  
- 11 ☐ **Use of <213>Organism (NEW RULES)**      Sequence(s) ☐ are missing this mandatory field or its response.
  
- 12 ☐ **Use of <220>Feature (NEW RULES)**      Sequence(s) ☐ are missing the <220>Feature and associated headings.  
Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial" or "Unknown"  
Please explain source of genetic material in <220> to <223> section.  
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32)  
(Sec. 1.823 of new Sequence Rules)
  
- 13 ☐ **PatentIn ver. 2.0 "bug"**      Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).  
Instead, please use "File Manager" or any other means to copy file to floppy disk.